

AMENDMENTS TO THE CLAIMS

1. (previously presented) A method of making a controlled release composition comprising: combining an organic phase comprising a water-soluble bioactive peptide and a polymer with an aqueous phase comprising an organic ion, wherein said organic ion is present in the aqueous phase to reduce degradation of said bioactive agent and wherein said organic ion is selected from the group consisting of trifluoromethyl-p-toluate, 2-naphthalene sulfonate, 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate; and recovering said composition.
2. (original) The method of claim 1, further comprising a cosolvent in said organic phase.
3. (original) The method of claim 2, wherein said cosolvent is selected from the group consisting of dimethyl sulfoxide, dimethyl formamide, N-methylpyrrolidinone, PEG₂₀₀, PEG₄₀₀, methyl alcohol, ethyl alcohol, isopropyl alcohol and benzyl alcohol.
4. (original) The method of claim 1, further comprising an emulsifying agent in said aqueous phase.
5. (previously presented) The method of claim 4, wherein said emulsifying agent is selected from the group consisting of poly(vinyl alcohol), albumin, lecithin, vitamin E-TPGS and polysorbates.
6. (currently amended) The method of claim 4, wherein said emulsifying agent is present in the aqueous phase ~~at from about 0.1 to 10% (w/w)~~ between 0 and 10% (w/w).

7. (original) The method of claim 1, wherein said organic phase comprises a solvent selected from the group consisting of methylene chloride, ethyl acetate, benzyl alcohol, acetone, acetic acid and propylene carbonate.

8. (previously presented) The method of claim 1, wherein said organic ion has a concentration in the aqueous phase ranging from about 0.1 to 1000 mM.

9. (original) The method of claim 1, wherein said controlled release composition is selected from the group consisting of microparticles and nanoparticles.

10. (original) The method of claim 9, wherein said microparticles and nanoparticles are biodegradable.

11. (original) The method of claim 1, wherein said polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids), polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s, poly(alkylene alkylate)s, copolymers of polyethylene glycol and polyorthoester, biodegradable polyurethanes, blends and copolymers thereof.

12. (canceled).

13. (previously presented) The method of claim 1, wherein said peptide is selected from the group consisting of LHRH agonists, immunogens, metabolic precursor that promotes growth and survival of cells and tissues, octreotide, oxytocin, insulin, leuprolide and somatostatin.

14. (original) The method of claim 1, wherein the organic phase and aqueous phase are combined using an emulsion process.

15. (original) The method of claim 14, wherein said emulsion process is selected from the group consisting of oil-in-water and water-oil-water.

16. (canceled).

17. (canceled).

18. (previously presented) A process for the production of a microparticle comprising a bioactive agent in a polymer, which comprises the steps of: a) combining a biodegradable polymer and an organic phase; b) combining a water-soluble bioactive peptide and said organic phase; c) combining an organic ion and an aqueous phase, wherein said organic ion is selected from the group consisting of trifluoromethyl-p-toluate, 2-naphthalene sulfonate, 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate; d) contacting the organic and aqueous phases through the use of an emulsion process; and e) recovering said microparticles.

19. (canceled).

20. (original) The process of claim 18, further comprising a cosolvent in said organic phase.

21. (original) The process of claim 20, wherein said cosolvent is selected from the group consisting of dimethyl sulfoxide, dimethyl formamide, N-methylpyrrolidinone, PEG₂₀₀, PEG₄₀₀, methyl alcohol, ethyl alcohol, isopropyl alcohol and benzyl alcohol.

22. (original) The process of claim 18, further comprising an emulsifying agent in said aqueous phase.

23. (previously presented) The process of claim 22, wherein said emulsifying agent is selected from the group consisting of poly(vinyl alcohol), albumin, lecithin, vitamin E-TPGS and polysorbates.

24. (currently amended) The process of claim 22, wherein said emulsifying agent is present in the aqueous phase ~~at from about 0.1 to 10% (w/w)~~ between 0 and 10% (w/w).

25. (original) The process of claim 18, wherein said organic phase comprises a solvent selected from the group consisting of methylene chloride, ethyl acetate, benzyl alcohol, acetone, acetic acid and propylene carbonate.

26. (previously presented) The process of claim 18, wherein said organic ion has a concentration in the aqueous phase ranging from about 0.1 to 1000 mM.

27. (canceled).

28. (canceled).

29. (original) The process of claim 18, wherein said polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids), polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s, poly(alkylene alkylate)s, copolymers of

polyethylene glycol and polyorthoester, biodegradable polyurethanes, blends and copolymers thereof.

30. (canceled).

31. (previously presented) The process of claim 18, wherein said peptide is selected from the group consisting of LHRH agonists, immunogens, metabolic precursor that promotes growth and survival of cells and tissues, octreotide, oxytocin, insulin, leuprolide and somatostatin.

32. (original) The process of claim 18, wherein said emulsion process is selected from the group consisting of oil-in-water and water-oil-water.

33. (canceled).

34. (canceled).

35. (canceled).

36. (previously presented) A method comprising: a) combining a water-soluble bioactive peptide with an organic phase; b) combining a polymer with said organic phase; b) combining an organic ion with an aqueous phase, wherein said organic ion is selected from the group consisting of trifluoromethyl-p-toluate, 2-naphthalene sulfonate, 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate; and c) contacting the resulting organic and aqueous phases through the use of an emulsion process to produce a controlled release composition including an organic ion-bioactive agent complex.

37. (original) The method of claim 36, further comprising a cosolvent in said organic phase.

38. (original) The method of claim 37, wherein said cosolvent is selected from the group consisting of dimethyl sulfoxide, dimethyl formamide, N-methylpyrrolidinone, PEG₂₀₀, PEG₄₀₀, methyl alcohol, ethyl alcohol, isopropyl alcohol and benzyl alcohol.

39. (original) The method of claim 36, further comprising an emulsifying agent in said aqueous phase.

40. (previously presented) The method of claim 39, wherein said emulsifying agent is selected from the group consisting of poly(vinyl alcohol), albumin, lecithin, vitamin E-TPGS and polysorbates.

41. (currently amended) The method of claim 39, wherein said emulsifying agent is present in the aqueous phase ~~at from about 0.1 to 10% (w/w)~~ between 0 and 10% (w/w).

42. (original) The method of claim 36, wherein said organic phase comprises a solvent selected from the group consisting of methylene chloride, ethyl acetate, benzyl alcohol, acetone, acetic acid and propylene carbonate.

43. (previously presented) The method of claim 36, wherein said organic ion has a concentration in the aqueous phase ranging from about 0.1 to 1000 mM.

44. (original) The method of claim 36, wherein said controlled release composition is selected from the group consisting of microparticles and nanoparticles.

45. (original) The method of claim 44, wherein said microparticles and nanoparticles are biodegradable.

46. (original) The method of claim 36, wherein said polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids), polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s, poly(alkylene alkylate)s, copolymers of polyethylene glycol and polyorthoester, biodegradable polyurethanes, blends and copolymers thereof.

47. (canceled).

48. (previously presented) The method of claim 36, wherein said peptide is selected from the group consisting of LHRH agonists, immunogens, metabolic precursor that promotes growth and survival of cells and tissues, octreotide, oxytocin, insulin, leuprolide and somatostatin.

49. (original) The method of claim 36, wherein said emulsion process is selected from the group consisting of oil-in-water and water-oil-water.

50. (canceled).

51. (canceled).